

## FGDC Annual Report to OMB Format for Agency Reports – FY 2004

The following outline should be used by FGDC Member Agencies (or Bureaus) for their Annual Spatial Data Reports, which will be consolidated by the FGDC and submitted to OMB. Reports **should be brief, using bullets where possible**. Please provide only the information that will be useful for OMB to assess the agencies' achievements and for establishing future direction.

### Part A

#### **GENERAL FEDERAL AGENCY RESPONSIBILITIES REPORT (All Agencies)**

1. Agency or Bureau: NASA
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3. Steering Committee Member: Ronald J. Birk Email: rbirk@hq.nasa.gov  
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4. Coordination Group Participant(s): Myra Bambacus Email:  
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5. Subcommittee or Working Group Participation (Subcommittees or Working Groups your agency is involved with, but does not lead).

Geologic Data SC	Ms Nancy Maynard	301-614-6572	Nancy.g.maynard.1@gsfc.nasa.gov
Soil Data SC	Dr Elissa Levine	301-614-6654	<a href="mailto:elissa@ltpmail.gsfc.nasa.gov">elissa@ltpmail.gsfc.nasa.gov</a>
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Earth Cover WG	Ms Martha Maiden	202-358-1078	<a href="mailto:mmaiden@mail.hq.nasa.gov">mmaiden@mail.hq.nasa.gov</a>
Standards WG	Mr Ben Kobler	301-614-5231	<a href="mailto:ben.kobler@gsfc.nasa.gov">ben.kobler@gsfc.nasa.gov</a>
Sustainable Forest Data WG	Mr Ed Sheffner	202-358-0239	<a href="mailto:ESheffne@mail.hq.nasa.gov">ESheffne@mail.hq.nasa.gov</a>
Homeland Security	Mr. Steve Ambrose	202-358-1599	<a href="mailto:sambrose@mail.hq.nasa.gov">sambrose@mail.hq.nasa.gov</a>
Civil Imagery & Remote Sensing WG	Mr. Ron Birk	202-358-0259	<a href="mailto:rbirk@hq.nasa.gov">rbirk@hq.nasa.gov</a>

6. Strategy: Has your agency prepared a detailed strategy for integrating geographic information and spatial data activities into your business process - in coordination with the FGDC strategy, pursuant to OMB Circular A-16? If yes, briefly describe.

The following NASA strategies exist:

- Global Change Master Directory  
<http://gcmd.gsfc.nasa.gov/Aboutus/standards/index.html>
- NASA Earth-Sun Mission Statement on Data Management  
<http://www.earth.nasa.gov/visions/data-policy.html>

- NASA Earth-Sun Mission Applied Sciences Program.  
<http://science.hq.nasa.gov/earth-sun/applications/index.html>
  - Geospatial Interoperability Office (GIO) coordinates agency-wide FGDC and Geospatial One Stop participation.
7. Compliance: How are your spatial data holdings compliant with FGDC Standards? How is your agency involved in Framework Standards development and adoption? Also, please list the FGDC Standards you are using or plan to use in your organization.
- NASA is completely compliant with FGDC standards and NASA's public data can be viewed in FGDC format if desired.
  - NASA participates in Framework Standards development through the standards bodies and partner agencies work.
  - FGDC Content Standard for Digital Geospatial Metadata
  - Remote Sensing Extensions for FGDC Metadata
  - FGDC Swath Content Standard:
8. Performance Measures: Does your agency have performance measures for spatial data activities? If so, please list the measures and target and describe how they contribute to development of the NSDI.
- NASA sets internal performance measures and shares all it's public data with the NSDI through harvestable nodes.
9. Reducing Redundancy of Planned Acquisitions Do you use the Geospatial One-Stop portal, [geodata.gov](http://geodata.gov), to ensure that the data are not already available?
- Program Formulation activities for new missions (new data-gathering spacecraft) include assessments of need for the data to be collected.
  - NASA participates through the International Committee on Earth Observations Satellites (CEOS), the National Research Council and FGDCs, Civil Imagery and Remote Sensing Working Group and Geospatial One-Stop to ensure that planned acquisitions contain data not already available.
10. Collection: Do your agency contracts and grants involving data collection include costs for following and using NSDI standards?  
Yes
11. Clearinghouse for Existing Data: Is all the data and/or metadata that your agency is able to share with the public published on the NSDI Clearinghouse? If not, please cite barriers encountered.

All datasets we make publicly available are published in GCMD Clearinghouse node.

12. Clearinghouse for Planned Investments: Is your agency posting information on planned investments in geospatial information to the Geospatial One-Stop portal to encourage partnerships and leverage investments in the acquisition of

geospatial data? If not, please cite when you will begin doing so and what barriers you have encountered that would prevent posting this information.

Yes

13. Geodata.gov: If metadata for your agency's geospatial data/information holdings is on a Clearinghouse Node already, has that Node been registered on geodata.gov for scheduled harvesting visits? If not, when is the Node scheduled to begin regular visits by the geodata.gov harvester?

NASA's data has been registered on geodata.gov.

14. E-Gov: How are you using geospatial data in your mission activities to provide better services? (Please list)

- Gathering and disseminating Earth Science geospatial data (with particular interest in Wind, Climate and Natural Hazards) is a principal NASA function, rather than an adjunct to agency business practices or public services.
- Interoperability standards are being promoted as a way to improve data access.
- NASA data is distributed by it's DAACs as well as USGS' EROS Data Center and NOAA's CDS
- Landsat-7 producing 150 Gbytes of data per day
- \* Terra spacecraft produces 194 Gbytes/day:
- \* When spacecraft data are processed to higher level products, Terra results in more than 1 Tbytes being added to the archive per day
- \*Terra instruments have greatly increased NASA's Earth Science data holdings.

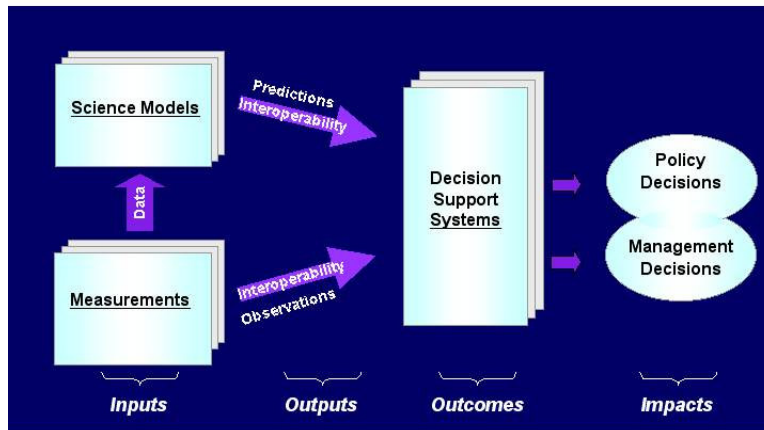
15. Geospatial One-Stop: How is your agency involved in the Geospatial One-Stop (Funding Partner, Channel Stewardship, geospatial framework data interoperability pilots, posting standards based Web Mapping services to the portal, etc)?

- Ron Birk, Director Applied Science Program serves on the GOS Board of Directors
- Myra Bambacus served as Acting Executive Director and continues in an Agency leadership role in support of GOS.
- Dr. Jeff de La Beaujardiere served as Portal Manager for the planning, requirements definition and development of a Portal based on an open standards architecture.
- NASA's GIO Program continues to participate on behalf of NASA in Channel Stewardship, Proposal functional requirements criteria and Open Standards and Web Services leadership expertise.
- 3 of the 1-Stop Framework Data Themes have participating NASA experts.
- NASA provides direct monetary contributions to 1-Stop.

16. Enterprise Architecture: Is geospatial data a component of your enterprise architecture? Please provide a brief summary of how geospatial data fits into your enterprise architecture.

Geospatial data is the basis of the Earth-Sun Mission Strategic Plan. Geospatial data is gathered, modeled, disseminated and studied accordingly.

The Earth-Sun Mission architecture is depicted in the figure below. It is based on the approach of enabling the assimilation of Earth Science model and remote sensing mission outputs to serve as inputs to decision support systems. This is all premised, of course on open geospatial standards and interoperability.



17. Partnerships: What efforts are being taken to coordinate data and build partnerships at the field level for data collection and standards development? Identify partnerships and data sharing activities with other federal agencies, state, local, and tribal governments and other entities. Does your agency have any formal agreements or MOU's concerning data sharing and integration?

- NASA has created and leads the FGDC Geospatial Applications and Interoperability WG (see Part B, below).
- NASA GIO holds Agency membership in Open GIS Consortium.
- NASA GIO provides agency representation in ISO Technical Committee 211 Geographic Information/Geomatics.
- NASA participates actively in Geospatial One-Stop (see #12, above).
- NASA Science Mission Applied Sciences Program has various ongoing partnerships and data-sharing activities.
- NASA's Facilities Engineering Division participates in the CAD/GIS Technology Center.

18. Concerns or Lessons Learned: Are there areas or issues regarding spatial data that require attention, or lessons learned that you would like to share with others? Please describe.

Volumes of Data are of concern and access and use of data through open standards. Also, Data visualization is another area of importance to NASA, in terms of advancing the technology. NASA Science Mission will continue to support the use of open, consensus standards in the development of information systems handling geospatial data.